I claim:

1. A braking device, particularly for a motor vehicle, comprising a pneumatic booster (12) comprising an envelope (14) in which there is delimited a vacuum chamber (16), and a vacuum pump (36) connected to said chamber to create a vacuum therein, characterized in that the vacuum pump (36) is fixed to the envelope (14) of the booster on the inside of the latter within the vacuum chamber (16).

2. The device according to claim 1, characterized in that the vacuum pump (36) is of annular shape and is coaxial with the booster (12).

3. The device according to claim 2, characterized in that the vacuum pump (36) comprises an annular casing (38, 40) in which reciprocating controlled-displacement intake and delivery means are housed, this casing being fixed to a roughly radial part of the envelope of the booster.

4. The device according to claim 3, characterized in that the vacuum pump (36) is of the electromagnetic type and comprises an annular armature (46) mounted in the casing (38, 40), a coil (48) housed in the armature, an axial core plunger (50) of tubular shape able to move in axial translation in the armature and the coil, and a sealed membrane (54) borne by the core plunger and by the casing and dividing the internal volume of the casing into an intake chamber (56) and a delivery chamber (58).

5. The device according to claim 4, characterized in that the intake chamber (56) of the casing communicates with the vacuum chamber (16) of the booster via at least one orifice (60) formed in a wall of the casing and fitted with a directional intake valve (62).

6. The device according to claim 5, characterized in that the delivery chamber (58) opens to the outside of the casing and communicates with the outside of the booster via at least one orifice (76) in the envelope

(14) of the booster, and is connected to the intake chamber (56) by at least one orifice (72) formed in the membrane (54) and fitted with a directional delivery valve (74).

7. The device according to claim 6, characterized in that the core (50) comprises a radial rim (52) on which the membrane (54) is fixed and which bears the directional delivery valve (74).

8. The device according to claim 7, characterized in that the directional intake and delivery valves (62, 74) are shutters with elastically deformable leaves that shut off an orifice.

9. The device according to claim 8, characterized in that the casing of the vacuum pump is made of two axially juxtaposed annular parts (38, 40) fixed together in a sealed manner by elastic clip fastening.

10. The device according to claim 9, characterized in that it comprises a master cylinder (10) associated with the booster (12) and in that the vacuum pump (36) is fixed to the envelope (14) of the booster on the same side as the master cylinder (10).

11. The device according to claim 10 wherein the annular casing (38, 40) of the vacuum pump surrounds part of the master cylinder housed in the envelope (14) of the booster.